

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspho.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/079,120	02/19/2002	Sylvain Nadeau	2002 P 02825 US 6825		
75	7590 12/24/2003		EXAMINER		
Siemens Corporation			NGUYEN, TRAN N		
Intellectual Prop 186 Wood Aver	perty Department	ART UNIT PAPER NUM			
Iselin, NJ 08830			2834		
			DATE MAILED: 12/24/2003		

DATE NETTICED: 12/24/200

Please find below and/or attached an Office communication concerning this application or proceeding.

			1:					
Office Action Summary		Applicati n No.	<u></u>	Applicant(s)				
		10/079,120		NADEAU ET AL.				
		Examiner		Art Unit				
		Tran N. Nguyen		2834				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply								
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  Status								
1)	Responsive to communication(s) filed on <u>15 October 2003</u> .							
2a)⊠	This action is <b>FINAL</b> . 2b) This action is non-final.							
3)	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims  AVII Claim(a) 1.20 in/ore pending in the application								
4) Claim(s) 1-20 is/are pending in the application.								
4a) Of the above claim(s) is/are withdrawn from consideration.								
5) Claim(s) is/are allowed.								
6) Claim(s) <u>1-3,7-12 and 16-19</u> is/are rejected.								
7) Claim(s) 4-6,13-15 and 20 is/are objected to.								
8) Claim(s) are subject to restriction and/or election requirement.  Application Papers								
9) The specification is objected to by the Examiner.								
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.								
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.								
If approved, corrected drawings are required in reply to this Office action.								
12) The oath or declaration is objected to by the Examiner.								
Priority under 35 U.S.C. §§ 119 and 120								
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).								
a) All b) Some * c) None of:								
1. Certified copies of the priority documents have been received.								
2. Certified copies of the priority documents have been received in Application No								
<ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>								
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).								
a) ☐ The translation of the foreign language provisional application has been received.  15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.								
Attachment(s)								
1) Notice	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449) Paper No(s)	4)	Notice of Informal	/ (PTO-413) Paper No Patent Application (PT				

Application/Control Number: 10/079,120

Art Unit: 2834

#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-2, 7-11, 16-18 and 19, as understood in light of the spec, are rejected under 35 U.S.C. 103(a) as being unpatentable over **Knight** et al (US 5492456) in view of **Gritter** et al (US 4651066).

Knight discloses a motor assembly (figs 1-2) comprising: a motor with cylindrical housing (26) being accommodated within motor housing (28); a supporting structure with decoupling structure (36) carrying the motor; wherein the mounting system 36 representatively includes a generally metal belly band (38) adjustably clamped around the side of the motor housing (28); four mounting legs in the form of specially configured bent metal rods (40a-40d); and support assemblies (42a-42d) secured to the outer side of the housing inlet wall (18), wherein decoupling structure including a pivot structure that permit pivoting of the motor with respect to the supporting structure with a relatively high degree of torsional flexibility, which substantially decreases the amount of motor vibration transmitted to the motor housing and thus reduces the overall blower operating noise; the pivot structure is provided by a combination of the following:

- (1) the lengths and torsional flexibility of the mounting legs (40a-40d),
- (2) the recurved leg portions (50),
- (3) the construction and orientation of the resilient support assemblies (42a-42d), and
- (4) the pivotal mounting of the looped outer leg ends 46 to the support assemblies.

Thus, the torsional spring characteristics of the flexible mounting legs (40a-40d) holds the motor in position while the torsional flexible mounting legs would obviously provide a

Application/Control Number: 10/079,120

Art Unit: 2834

predetermined natural frequency of the motor in torsion around the axis of rotation of the shaft while providing natural frequencies higher than the certain natural frequency for degrees of freedom of the motor other than torsion.

Knight substantially discloses the claimed invention, except for the limitations of a DC motor including: a stator, a rotor assembly supported for rotational movement with respect to the stator and the control circuit with switch to be controlled by a pulse width modulated signal.

Gritter, however, teaches a DC motor with a permanent magnet stator, a rotor assembly is an armature supported for rotational movement with respect to the stator (fig 3). These features are essential components of the motor. Therefore, obviously a motor must have these components in order to be operatable. The Gritter's motor also includes a control circuit with switch to be controlled by a pulse width modulated signal (fig 2, and figs 12) for controlling the speed of the motor.

Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify Sharp's motor assembly by embodying a motor having a stator, a rotor assembly supported for rotational movement with respect to the stator, and a the control circuit with switch to be controlled by a pulse width modulated signal, as taught by of Gritter, because these components are essential parts of the motor in order to be controllably operatable.

1. Claims 3 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knight and Gritter, as applied in the rejection against the base claim, and further in view of level of ordinary skills of a worker in the art.

The combination of Sharp and Gritter refs substantially discloses the claimed invention, except for the added limitations of the torsional springs are provided generally 120 degrees apart.

Knight discloses that the torsional flexible mounting legs (40a-40d) are circumferentially spaced apart from one another by 90 degrees instand of 120 degrees as in the claimed invention. However, the Knight's important teaching is to use spring for mounting the motor to the support structure carrying the motor. Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify the motor support assembly by

Application/Control Number: 10/079,120

Art Unit: 2834

embody not only one but three torsional springs at an arrangement of 120 degree apart. This would further improve the reduction of vibration therein and doing so only require skills in the art because it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. St. Regis Paper Co. vs. Bemis Co., 193 USPQ 8.

### Allowable Subject Matter

Claims 4-6, 13-15, and 20 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

#### Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tran N. Nguyen whose telephone number is (703) 308-1639. The examiner can normally be reached on M-F 7:00AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Burton Mullins can be reached on (703)-305-7063. The fax phone number for the organization where this application or proceeding is assigned is (703)-872-9306.

Art Unit: 2834

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)-308-1782.

Tran N. Nguyen

Primary Examiner

Art Unit 2834